

from the shock of even the slightest injury. In my patient's case, a state bordering on delirium tremens soon set in, and proved rapidly fatal. He was never intemperate, never subject to any innate vice of the nervous system."

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e.—THERAPEUTICS OF THE NERVOUS SYSTEM.

CAFFEINE AS A LOCAL ANÆSTHETIC.—Dr. Ferrier and Dr. Fauvel claim that caffeine is as good a local anæsthetic as cocaine. Dr. F. employed it to the almost entire exclusion of the latter in his practice. Dr. Laborde, on the other hand, was unable to obtain any anæsthetic effect with caffeine or theine (*Lancet*, May 23, 1885). Argyl-Robertson also obtained no anæsthesia, but mydriasis with a 16-per-cent. solution of caffeine (*Brit. Med. Jour.*, Jan. 3, 1885). These different results will probably be found to be due to difference in the preparations. It has already been shown that many preparations of coca are different alkaloids. The product of the second maceration of coca leaves, for example, contains a large amount of a derivative of hygrine (Panas, Calmelo). This has the property of producing mydriasis, but not anæsthesia. The product of the first extraction, on the other hand (pure cocaine), does not cause mydriasis. The high price of cocaine has caused manufacturers to extract the leaves twice. Very probably similar impurity will be found in caffeine.

APOMORPHINE IN NERVOUS AFFECTIONS.—Weil used apomorphine successfully in a case of singultus in a patient with tubercular meningitis. The singultus had resisted electricity, morphia, and atropia, and was so severe as to prevent sleep. He also reports (*Lyon Médicale*, 48, 1884) its successful use in a case of chorea, which was so severe as to cause insomnia, dysphagia, and emaciation. Immediate improvement followed and continued under hypodermic doses of apomorphia ($2\frac{1}{2}$ mgm.). The same writer also reports a case of cortical epilepsy successfully treated by this drug. The usual remedies had been given without effect. Subcutaneous injections of apomorphine continued for thirty-eight days caused the disappearance of the paroxysms. Dr. Lawrence also cured with apomorphine a case of hereditary hystero-epilepsy that had resisted every other treatment.—The *Therapeutic Gaz.*, April, 1885.

COCAINE IN THE TREATMENT OF THE OPIUM-HABIT.—Erlenmeyer was induced, by the difference of opinion regarding the value of cocaine and its physiological action when given to counteract the effect of the withdrawal of opium, to study the effect of the drug. E. employed Merck's preparation, and made 236 separate observations. He gave the drug subcutaneously in

doses varying from 0.005 to 0.06. Of the 236 injections, 232 were given to 8 different opium-takers, while the remaining 4 were given, for purposes of comparison, to patients without the habit. The qualitative effect of the cocaine in opium-takers was in every case the same. Whatever difference was observed was quantitative, and was independent of the dose. His results are summarized as follows: 1. Cocaine, in doses up to 0.1 per day, has no effect upon the cerebro-spinal centres. 2. In doses from 0.005 and over, it causes paralysis of the vaso-motor centres. This paralysis is indicated by the increased pulse-rate, dilatation of the arteries, lessened arterial distension (dichrotism), sweating, increase of temperature. This vaso-motor paralysis was always extremely transient, reached quickly its maximum, and 15-25 minutes after the injection completely disappeared. 3. Cocaine causes a feeling of warmth, which is both general and localized, in the epigastrium on an empty stomach; on an empty stomach, a disagreeable, almost painful, feeling of pressure and cramp in the epigastrium. As to the effect of the drug in allaying the symptoms following the withdrawal of morphia, E. found that it was decidedly beneficial. Under its influence all disagreeable symptoms subsided. This effect, however, is only transient, and the symptoms soon return. E. thinks that cocaine in its action takes the place of morphia, and is not antagonistic. The effect of cocaine after all morphia has been withdrawn is absolutely negative. All patients objected to cocaine on account of the feeling of depression, etc., excited by it. On the whole, cocaine is only of slight value as a substitute for morphia during the withdrawal of the latter. E. thinks that the different results obtained may be due to different alkaloids, extracted by different makers from the crude drug.—*Centralbl. für Nervenheilk.*, 1885, No. 13.

CHLORIDE OF METHYL IN NEURALGIA.—The *Therapeutic Gazette*, No. 7, 1885, gives the following facts regarding chloride of methyl, to which attention has lately been attracted in France. It is a colorless gas soluble in water, with an ethereal odor. It is easily liquefied by a reduction of temperature or by pressure, and when once reduced to a fluid form it possesses a great tendency to become vaporized, and at an ordinary temperature passes at once into vapor. In passing from the fluid to the gaseous state, it absorbs an immense quantity of heat, and the cold then produced is sufficient even to freeze mercury. For therapeutic purposes it is condensed in strong bottles, made of copper to prevent explosion, and allowed to escape by a tube in a fine spray, which is directed against a nerve for a few seconds. The patient at first experiences a sensation of intense cold, which rapidly gives way to a burning feeling. Frequently a single application will be sufficient to relieve the pain, but when the first fails it may be repeated once or twice with an interval of one or two days.

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